

## **REMARKS/ARGUMENTS**

### **CLAIM REJECTIONS – 35 USC § 112**

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. According to the Office Action, the phrase “including” renders the claim indefinite because the claim includes elements not actually disclosed, thereby rendering the scope of the claim unascertainable. In support, the Office Action references MPEP § 2173.05(d).

Reconsideration is respectfully requested. To begin with, Applicant has reviewed MPEP § 2173.05(d) and does not find any support for rejecting the term “including.” To the contrary, MPEP § 2111.03 explains that the term “comprising” is synonymous with the term “including.” The term “comprising” is a term of art used in claim language, and the term means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim. In other words, the term “comprising” leaves the claim open for the inclusion of unspecified ingredients even in major amounts.

Despite this “openness,” Applicant maintains that claim 1 satisfies all requirements of 35 U.S.C. § 112. Indeed, the composition employed in claim 1 that includes “(a) an insecticide or plant growth regulator; (b) an organosiloxane surfactant; and (c) water” particularly points out and distinctly claims the composition that is employed in claim 1. Together with the written description, a person skilled in the art can make and use the composition in a manner set forth in claim 1.

### **CLAIM REJECTIONS – 35 USC § 103**

Claims 1-7, 9, 11-13, and 15-25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Riego, et al. (U.S. Patent No. 6,040,272), in view Esposito (U.S. Patent No. 4,822,407) and Hofer (U.S. Patent No. 6,500,416 B2). Besides the reliance

on Hofer, the underpinnings of the rejection are essentially the same as the previous Office Action.

In response to Applicant's previous arguments, the Office Action states:

[R]iego et al. **do disclose a herbicidal composition** applied to bark in basal (bark periderm) and dormant stem regions of plants (abstract). Riego et al. teach a composition that preferably comprises about 5-35% by weight polyoxyethylene heptamethyl trisiloxanes (column 3, lines 6-8 and column 5, line 33). Additionally, Riego et al. teach the use of **herbicides** that are water-soluble and has herbicidal activity against woody, brush or arborescent plants, preferably, a water-soluble salt of N-phosphonomethylglycine (glyphosate), 2,4-dichlorophenoxyacetic acid (2,4-D), dicamba, triclopyr or imazapyr (column 3, lines 52-60, claims 1 and 24 auxin plant growth regulator of instant application). Therefore, the Examiner has established that the **claimed method** of applying a **fungicide** to a tree is *prima facie* obvious over Riego et al in view of Esposito and Hofer et al [emphasis added].

Reconsideration is respectfully requested. Applicant believes that there is confusion as to the nature of the claimed invention, which ostensibly results in an inappropriate finding of obviousness. The apparent confusion is evidenced by the forgoing quote, which was lifted directly from page 9 of the Office Action.

Applicant agrees that Riego is directed toward herbicidal compositions. Applicant agrees that Riego uses the herbicide, which is a water soluble glyphosate, for treatment of woody plants by way of through-bark penetration of the herbicide.

But, applicant does not agree that the "claimed method" is directed toward the application of a "**fungicide**" to a tree. Instead, the claimed method is directed toward the application of an "insecticide or a plant growth regulator" to a tree.

Riego does not teach, suggest, or contemplate the application of pesticides or plant growth regulators in a manner consistent with the application of herbicides as taught by Riego. In fact, there is no evidence of record that a pesticide or plant growth regulator could be used together with (or in lieu of) the herbicide in the composition of Riego. The case law is replete with examples and clear direction by the courts that chemistry is an unpredictable science, and extrapolations or substitutions of chemical components or substituents cannot simply be made by those skilled in the art. See *Eisai*

*Code. Ltd. v. Dr. Reddy's Laboratories, Ltd.*, 2008WL2791884 (C.A. Fed.). There is no evidence of record supporting a conclusion that one of skill in the art could predict that a pesticide or herbicide could be used for through-bark application in conjunction with an organosiloxane in a manner similar to the herbicide employed in Riego.

#### **DECLARATIONS UNDER 37 CFR 1.132**

The Office Action states that the Declarations of Todd O'Connell and Franklin E. Sexton have been fully considered but they are not persuasive because they are opinion affidavits and are therefore accorded no patentable weight.

Reconsideration is respectfully requested. As set forth in MPEP § 716.01(d), the ultimate determination of patentability must be based on consideration of the entire record, by preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. Although factual evidence is preferable to opinion testimony, such testimony is entitled to consideration and some weight so long as the opinion is not on the ultimate legal conclusion at issue. While an opinion as to legal conclusion is not entitled to any weight, the underlying basis for the opinion may be persuasive. See MPEP 716.01(c)(III). In assessing the probative value of an expert opinion, the Examiner must consider the nature of the material sought to be established, the strength of any opposing evidence, the interest of the expert and in the outcome of the case, and the presence or absence of factual support for the expert's opinion. *Id.* Applicant notes that factually based expert opinions on the level of ordinary skill in the art have been held to be sufficient to rebut a *prima facie* case of obviousness. *In re Oelrich* 198 USPQ 210 (CCPA 1978). And, expert opinion on what the prior art taught, supported by documentary evidence and formulated prior to making of the claimed invention, received considerable deference. *In re Carroll*, 202 USPQ 571 (CCPA 1979).

Thus, even if the submitted Declarations of Todd O'Connell and Franklin E. Sexton are merely opinion affidavits, they still cannot be simply disregarded. That is, they must be afforded some patentable weight.

Moreover, Applicant does not believe that these affidavits are merely opinions. In fact, these affidavits provide objective evidence. For example, the Declaration of Todd O'Connell states at paragraph 7 that "those skilled in the art understand that the types of organosiloxane surfactants described in Mr. Stringfellow's application (particularly the ethoxylated versions thereof) would be incompatible with oil-based compositions." Also, the Declaration of Todd O'Connell objectively sets forth the understanding of those skilled in the art. For example, paragraph 7 states that "the skilled artisan understood that systemic chemicals could be incorporated into the vascular system of trees through foliar application, soil application, or by mechanically penetrating the bark of a tree." In the case of oil-soluble herbicides, attempts to penetrate the bark of the tree have been employed. Applicant maintains that this evidence unequivocally frames the understanding of those skilled in the art and makes readily apparent the fact that—while desirable—the prior art did not provide a solution for applying vascular pesticides or plant growth regulators in aqueous solution to the bark of trees.

Likewise, the Declaration of Franklin E. Sexton provides persuasive objective evidence. For example, paragraph 9 reinforces the unpredictability that is known by those skilled in the art and explains that many factors come into play including the target species, the location of application, the environmental conditions, and the complimentary agricultural chemical. Indeed, this objective evidence is not merely an opinion that opines on legal conclusions of patentability, but is instead evidence that explains the prior art and the understanding by those skilled in the art. Moreover, this Declaration sets forth evidence that is not refuted by any evidence of record.

Furthermore, the Declaration of Franklin E. Sexton provides strong evidence of non-obvious to the extent that it expresses his skepticism (thereby undermining predictability) as one of skill in the art. Applicant believes that this testimony should be afforded considerable patentable weight inasmuch as it is taken from the standpoint of one of skill in the art prior to the claimed invention. That is, the Declaration states that the declarant did not believe that one of skill in the art (including himself) would have

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predicted that the technology of Riego could have been extended to satisfy the desire to deliver systemic insecticides or plant growth regulators to the vascular system of woody plants.

**CONCLUSION**

In view of the foregoing, Applicant maintains that the claimed invention is patentable over the prior art of record, either alone or in combination. Applicant earnestly solicits and requests a proper consideration of all evidence of record. It is respectfully requested that all pending claims are in condition for allowance. Accordingly, Applicants request early and favorable reconsideration in the form of a Notice of Allowance.

If necessary to affect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to affect a timely response. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 18-0987 (Docket #: QST.P.US0002).

Respectfully submitted,



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Date

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